STEULER Linings

TI 136

Technical Information Surface Protection Linings

ALKADUR P82

Solvent-free primer for polyurethane-based coating systems.

Base

Epoxy resin

Material Group

Primers, levelling compounds

Description

Solvent-free primer for OXYDUR UP 82 / OXYDUR PTB coating systems for concrete and steel substrates.

Use

Primer for concrete and steel substrates.

Substrate

Concrete / screed

Refer to DIN EN 14879-1 as well as to STEULER-KCH-Formsheet 010.

To attain a sufficient adhesive tensile strength, the substrate is generally to be pretreated in such a way that it is free of cement slurry, cement skin, loose and crumbly particles, structure imperfections and separating substances.

The residual moisture of cementitious substrates must not exceed 4 %.

Steel

Refer to DIN EN 14879-1 as well as to STEULER-KCH-Formsheet 020.

The steel surface shall be sandblasted to a metallic bright finish. A preparation degree of SA 2 $\frac{1}{2}$ as specified in DIN EN ISO 12944-4 and a roughness grade "medium (G)" as specified in DIN EN ISO 8503-1 must be achieved; minimum surface roughness $R_z = 70 \mu m$. After blasting, the formation of new rust must be prevented by suitable measures, e. g. priming directly.

The substrate should have a temperature of approx. 10-30 °C.

Moisture

During application, the substrate must be kept absolutely dry. Uncured material has to be protected from any kind of moisture (condensation, fog, precipitation or other water source). Distance to dew point has to be at least 3 K, at a relative humidity of above 70 % at least 5 K.

Packaging / Shelf life

All components must be stored and transported dry and frost-free. The minimum storage life applies to a storage temperature of 20 °C, unless otherwise specified. Higher temperatures reduce, lower temperatures increase the shelf life.

Components	Item number	Package	Content	Shelf life
Alkadur-P82-Resin	5035233181	Drum	9.2 kg **	24 Months
Alkadur-P82-Hardener	5035232003	Drum	5 kg **	24 Months
Alkadur-P82-Additive	5035231045	Can	1.25 kg **	12 Months

^{**} predosed packaging

STEULER Linings

TI 205

OXYDUR UP 82 E

Base

Polyurethane

Material Group

Floor- / wall coatings - Leveling compounds

Description

Jointless, elastic coating system for the protection of concrete and steel substrates. The cured system has a plain-coloured, smooth surface and is suitable for fork lift traffic.

Coating of concrete and screed surfaces in areas with high mechanical load.

Properties

- Self-levelling (floor)
- smooth surface
- if required slip resistant version possible
- plain-coloured
- jointless
- suitable for fork lift traffic
- thermal resistance up to 60 °C

Exposed to UV-Light the surface may become dull or change colour.

Physical Data

Physical Data	Value
Property (unit), Test method	1.80
Density (a/cm³), DIN EN ISO 1183-1, ASTM D 792 (floor)	1.06
Donsity (a/cm³) DIN EN ISO 1183-1, ASTM D 792 (Wall)	8
Florural strength (MPa), DIN EN ISO 178, ASTM C 580	21
Compressive strength (MPa), DIN EN ISO 604, AS IM C 579	140
Electrical resistance (Ohm) acc. to DIN EN 14879-3 for a relative number of 275	10
Flongation at tear (%), DIN EN ISO 527, ASTM C 307	≈ 95
Shore A hardness, DIN 53505, ASTM D 2240	4.5
Tensile Strength (MPa), DIN EN ISO 527, ASTM C 307	5
Lowest working temperature (°C)	35
Maximum working temperature (°C)	95
Elastic deformation (%)	5
Plastic deformation (%)	

Chemical Resistance

For detailed information about the chemical resistance please refer to Technical Information 200 and 200A.

Substrate

Concrete / screed

Refer to DIN EN 14879-1 as well as to STEULER-KCH-Formsheet 010.

To attain a sufficient adhesive tensile strength, the substrate is generally to be pretreated in such a way that it is free of cement slurry, cement skin, loose and crumbly particles, structure imperfections and separating substances.

The substrate should have a temperature of approx. $10-35\ ^{\circ}\text{C}$.

Moisture

The residual moisture of the substrate must not exceed 4 % for concrete.

During application, the substrate must be kept absolutely dry. Uncured material has to be protected from any kind of moisture (condensation, fog, precipitation or other water source). Distance to dew point has to be at least 3 K, at a relative humidity of above 70 % at least 5 K.

System Design

- Priming with ALKADUR P82 (TI 136)
- If necessary pore filling scratch coat floor
- if necessary filling of cavities skirting area / wall
- on floor surfaces: Oxydur UP 82 E
- Wall surfaces: Oxydur UP 82
- if necessary adhesive layer for subsequent tiles / bricks OXYDUR K 425 (TI 102) + sprinkling with SKC-Filler 16
- if required, slip-resistant top layer or sealing with OXYDUR OL (TI 104) or OXYDUR PUW (TI 110)

Packaging / Shelf life

All components must be stored and transported dry and frost-free. Shelf life is specified for a storage temperature of 20 °C. Higher temperatures reduce, lower temperatures increase the shelf life.

emperatures reduce, lower temper	The boundary of the second sec	Item number	Package	Content	Shelf life
Components	Colour ap-	Item manno.			
	1 9	5034124004	Bucket	6 kg**	24 Months
Oxydur-UP82-Solution 1	1012 1001		Bucket	6 kg**	24 Months
Oxydur-UP82-Solution 1	RAL 6002*	5034125004			24 Months
	RAL 7030*	5034127004	Bucket	6 kg**	
Oxydur-UP82-Solution 1	1012 7000		Bucket	6 kg**	24 Months
Oxydur-UP82-Solution 1	RAL 7031*	5034120004	Duonot		-

Mixing Ratio / Consumption Priming with ALKADUR P 82

	Part by weight	Part by volume
See TI 136		

Pore filling scratch coat floor

	Part by weight	Part by volume	
Oxydur-UP82-E-Solution 1	2.5	2.46	
Oxydur-UP82-Solution 2	1.0	0.85	
SKC-Filler 14	3.5	2.35	
Consumption per 1 mm thickness	1.600 kg / m ²		
Work steps	1		
Layer thickness	If required		

filling of cavities socket / wall

	Part by weight	Part by volume	
Oxydur-UP82-Solution 1	2.5	2.48	
Oxydur-UP82-Solution 2	1.0	0.85	
Oxydur-BW-Powder	8.8	5.87	
Cab-O-Sil TS 720	0.05	1.00	
Consumption per 1 mm thickness	1.900 kg / m ²		
Work steps:	1		
Layer thickness:	If required		

Floor surfaces Oxydur UP 82 E

	Part by weight	Part by volume	
Oxydur-UP82-E-Solution 1	2.5	2.48	
Oxydur-UP82-Solution 2	1.0	0.85	
Oxydur-E-Powder	9.1	5.62	
Consumption	9.000 kg / m²		
Layer thickness:	5.0 mm		
Work steps	1		

^{*} additional colours on request

^{**} predosed packaging